

WEATHER OF NORTH AMERICA AND ADJACENT OCEANS

NORTH ATLANTIC OCEAN

By F. A. YOUNG

The following table shows the average sea-level pressure for the month at a number of land stations on the coast and islands of the North Atlantic. The readings are for 8 a. m., 75th meridian time, and the departures are only approximate, as the normals are taken from the Pilot Chart and are based on Greenwich mean noon observations, which correspond to those taken at 7 a. m., 75th meridian time.

Station	Average pressure	Departure
	Inches	Inches
St. Johns, Newfoundland.....	29.80	-0.09
Nantucket.....	30.15	+0.06
Hatteras.....	30.17	+0.04
Key West.....	30.09	-0.01
New Orleans.....	30.15	+0.03
Swan Island.....	29.97	-0.01
Turks Island.....	30.14	+0.09
Bermuda.....	30.23	+0.09
Horta, Azores.....	30.17	+0.07
Lerwick, Shetland Islands.....	29.81	+0.11
Valencia, Ireland.....	30.04	+0.14
London.....	30.25	+0.25

At Lerwick, while the monthly average was not greatly above the normal, the barometric readings on the first three days of the month were all below 29 inches. The monthly range was from 28.52 inches, on the 2d, to 30.78 inches on the 26th. At Horta the range was from 29.34 on the 13th to 30.64 on the 28th.

This is the fifth consecutive month on which the number of days with winds of gale force over the ocean as a whole exceeded the normal as shown on the Pilot Chart. There were few days on which unfavorable weather did not prevail over some part of the steamer lanes, the storm area at times extending as far south as the 30th parallel.

According to reports received, the number of days with fog was less than usual over the ocean as a whole, with the exception of the waters adjacent to the American coast between the 35th and 45th parallels, where it was observed on from three to eight days. Fog was also reported on three days in the western part of the Gulf of Mexico and on two days in the vicinity of the Bermudas.

The month began with a severe disturbance near the north coast of Scotland, and on the 1st and 2nd moderate to strongly westerly winds prevailed over the region between the 40th and 50th parallels, extending as far west as the 40th meridian.

Mr. R. Evans, second officer of the British S. S. *Menominee*, Captain Gallard, bound from London to Boston, reports:

At 2 p. m. on January 2, in 45° 20' N., 42° 30' W., a tidal wave of great height was encountered from NW. by N., height about 45 feet.

On the 2nd a shallow depression was central near Hatteras. This moved slowly northeastward and on the 4th and 5th was over Newfoundland, although on these days moderate weather was the rule over the ocean as a whole. On the 2nd and 3rd heavy winds were encountered over a limited territory between Hatteras and Nantucket, and on the latter date northerly to northwesterly gales, accompanied by hail and snow, were reported from vessels between the 45th and 50th parallels and the 30th and 40th meridians.

On the 6th there was a second depression near Hatteras that deepened rapidly as it moved northeastward. Charts VIII to XI cover the period from the 7th to 10th, inclusive, and an examination of these and of the table of ocean gales and storms will give an idea of the extent and severity of this disturbance.

On the 12th and 13th there was a "double Low" over the ocean. On the former date one center was near 40° N., 40° W., and the other near 50° N., 30° W. On the 13th the first Low was central in the vicinity of the Azores, and the second at 50° N., 20° W. By the 14th they had apparently joined forces, and until the 17th an area of low pressure covered the region between Scotland and Iceland. This disturbance reached its greatest intensity on the 13th when practically the entire ocean north of the 30th parallel and east of the 45th meridian was swept by severe gales, accompanied by rain, hail, and snow. On the 12th there was a moderate depression off the American coast between Hatteras and the Virginia Capes. This moved northeastward, losing in intensity, reaching Nantucket on the 13th and St. Johns, Newfoundland, on the 14th. On the 12th moderate gales were encountered between the 35th and 40th parallels, and on the 14th in the vicinity of St. Johns.

On the 18th there was a disturbance of limited extent and intensity central near 47° N., 40° W., and on the same date unusually strong easterly trades prevailed between the Canal Zone and Jamaica.

On the 20th there was a moderately deep depression between Hatteras and New York, with northeasterly gales off the immediate coast. On the same date the middle section of the steamer lanes was swept by moderate to strong gales, the storm area extending as far south as the 35th parallel. On the 21st the western Low was near 40° N., 53° W., and the conditions were similar to those of the previous day, except that the storm area had increased in extent, as gales were encountered over the greater part of the ocean between the 30th and 50th parallels, east of the 65th meridian.

On the 22nd the western disturbance was central near 42° N., 45° W., and some gales were reported from the area between the 35th and 45th parallels and the 35th and 50th meridians. Moderate westerly gales were also encountered between the 25th meridian and the coast of southern Europe.

On the 23d there were two Lows over the ocean, the first central near the west coast of Newfoundland, and the second near 48° N., 30° W. Westerly to northwesterly gales prevailed over the region between the Bermudas and the 45th parallel, and reports of storms were received from vessels in the territory between the two disturbances and also in the eastern section of the steamer lanes.

The western Low moved but little during the next 24 hours, and on the 24th the eastern disturbance was central near 50° N., 20° W. Northwesterly gales were reported along the American coast between Key West and Hatteras, and heavy weather also prevailed over the greater part of the ocean between the 30th and 50th parallels and the 20th and 60th meridians.

By the 25th the conditions had moderated over the greater part of the ocean, although gales were reported from vessels in the middle section of the steamer lanes.

On the 26th abnormally high pressure was recorded at land stations in northern Europe, while low pressure still prevailed in mid-ocean. From that date until the 30th moderate to strong gales were encountered over the middle and eastern sections of the steamer lanes, although the storm area varied considerably in extent from day to day.

On the 28th there was a moderate depression of limited extent a short distance north of Bermuda, and on that date and the 29th northerly to easterly gales prevailed along the American coast from Hatteras to Nantucket.

On the 30th Portland, Me., was near the center of a disturbance which gave moderate to strong gales between the 35th and 45th parallels, west of the 60th meridian.

On the 31st the center of the Low was near St. Johns, Newfoundland, and the storm area had extended as far east as the 40th meridian.

Ocean gales and storms, January, 1925

Vessel	Voyage		Position at time of lowest barometer		Gale began—	Time of lowest barometer	Gale ended—	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Highest force of wind and direction	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
North Atlantic Ocean													
Novian, Br. S. S.	New York	London	49 42 N.	11 28 W.	1st	2 a., 1st	1st	29.58	WSW	SW., 8	W	SW., 11	WSW-SW-W.
Turcoman, Br. S. S.	Avonmouth	Portland, Me.	51 35 N.	13 46 W.	1st	4 a., 2d	3d	28.61	SSW	S., 9	W	W., 9	SSW-W.
San Jacinto, Am. S. S.	New York	Galveston	38 35 N.	74 20 W.	1st	2 a., 2d	10 p., 2d	29.80	N	E., 10	NE	ENE., 10	E-ENE.
Lancaster, Am. S. S.	London	New York	36 35 N.	68 14 W.	6th	3 p., 6th	7th	29.58	SSE	SW	NNW	NW., 10	SW-W.
Chester Valley, Am. S. S.	Galveston	Liverpool	38 40 N.	63 00 W.	6th	5 a., 7th	7th	28.70	W	NW., 10	NW	12	W-NW.
Chifuku Maru, Jap. S. S.	Lisbon	Philadelphia	41 01 N.	53 41 W.	7th	2 p., 7th	10th	29.74	Var.	SW., 12	N	12	SW-W.
Ala, Am. S. S.	New York	Rotterdam	45 30 N.	37 50 W.	7th	3 p., 8th	11th	28.97	SSE	SW., 9	SSW	SSE., 11	S-SW.
Monticello, Am. S. S.	Hamburg	Philadelphia	50 55 N.	31 30 W.	8th	3 a., 9th	10th	28.96	SSE	SW., 9	WSW	S., 10	S-SW-WSW.
Wieldrecht, Du. S. S.	Houston	Antwerp	42 00 N.	46 00 W.	12th	8 a., 12th	12th	29.39	E	E., 11	N	E., 11	E-N.
Mapia, Du. S. S.	Rotterdam	New Orleans	35 37 N.	39 22 W.	12th	4 p., 12th	14th	29.42	SSW	W., 9	N	W., 10	SSW-W-N.
San Gil, Br. S. S.	Boston	Port Limon	36 06 N.	73 11 W.	11th	1 a., 12th	12th	29.71	E	E., 10	W	E., 8	E-SW-W.
Lavada, Br. S. S.	Avonmouth	New Orleans	47 04 N.	19 26 W.	12th	Noon, 13th	13th	28.93	SSW	SSW., 10	NW	SW., 11	S-SW.
Dakotian, Br. S. S.	Liverpool	do.	37 37 N.	37 23 W.	11th	8 p., 13th	13th	29.36	W	NNW	NNW	NNW., 10	W-NNW.
Hellig Olav, Dan. S. S.	Norway	New York	58 04 N.	20 25 W.	12th	2 a., 14th	16th	28.01	SSW	NW., 8	WSW	NNW., 9	SW-W-NW.
Manchester Merchant, Br. S. S.	Manchester	St. John, N. B.	46 56 N.	51 13 W.	14th	4 p., 14th	16th	29.29	SW	W	NNW	9	SW-W.
Caronia, Br. S. S.	Boston	Liverpool	46 40 N.	37 50 W.	14th	8 a., 15th	15th	29.47	S	S., 10	NW	11	S-NW-W.
Stockholm, Swed. S. S.	New York	Gothenburg	56 20 N.	27 00 W.	16th	17th	17th	28.68	ENE	W	W	W., 12	S-SW.
Hellig Olav, Dan. S. S.	Norway	New York	49 25 N.	48 00 W.	17th	2 a., 18th	20th	28.82	SSE	SW., 8	NNW	SE., 10	SE-S-WSW.
F. H. Hillman, Am. S. S.	England	Canal Zone	12 20 N.	76 54 W.	18th	4 p., 18th	18th	29.79	E	E., 8	E	E., 9	Steady.
Westphalia, Ger. S. S.	Hamburg	New York	40 06 N.	12 08 W.	20th	Noon, 20th	20th	29.64	E	E., 8	NW	NW., 11	NW-NW.
Am. Press, Am. S. S.	New Orleans	Liverpool	45 15 N.	42 20 W.	19th	Noon, 20th	21st	29.73	NW	NW., 9	NNW	11	NNW-NW.
Innoko, Am. S. S.	Rotterdam	New York	42 08 N.	26 05 W.	19th	10 a., 20th	21st	29.60	SSW	SW., 10	SW	10	SW-NW.
Albert Ballin, Ger. S. S.	Southampton	do.	49 30 N.	21 11 W.	20th	5 p., 20th	20th	29.36	SSE	SSE., 11	SW	SSE., 11	SSE-S.
Rotterdam, Du. S. S.	Rotterdam	do.	42 25 N.	54 54 W.	21st	Noon, 21st	21st	29.06	E	E., 7	N	E., 10	E-NNE.
Anniston City, Am. S. S.	Port Said	Boston	36 39 N.	39 00 W.	21st	Noon, 21st	23d	29.62	WSW	SW., 3	NW	NW., 10	SW-NW.
Westport, Am. S. S.	Copenhagen	do.	58 50 N.	15 45 W.	19th	21st	21st	29.67	SE	SSE., 10	Var.	SSE., 10	S-SSE.
Liguria, Ger. S. S.	Hamburg	Philadelphia	50 00 N.	13 40 W.	21st	4 p., 21st	22d	29.57	S	S., 9	W	S., 9	S-WSW.
Darlan, Br. S. S.	Boston	Manchester	43 14 N.	47 05 W.	22d	5 a., 22d	22d	29.94	NW	NW., 9	NNW	10	E-S.
Bredijk, Du. S. S.	Rotterdam	New York	41 36 N.	64 18 W.	23d	8 a., 23d	24th	29.47	NNW	NNW	N	NW., 9	W-WNW.
Zarabco, Am. S. S.	Bordeaux	do.	34 22 N.	54 30 W.	23d	9 a., 23d	24th	29.63	SW	SW., 9	NNW	11	S-W.
Clavarak, Am. S. S.	Hamburg	Pensacola	43 45 N.	21 40 W.	23d	4 p., 23d	24th	29.81	SW	S	W	9	NNE-NE.
Subatco, Am. S. S.	Pensacola	New York	31 10 N.	79 26 W.	23d	Noon, 23d	24th	30.32	NE	NNE., 8	NE	NE., 9	W-NW-WNW.
Albert Ballin, Ger. S. S.	Southampton	do.	44 15 N.	50 01 W.	24th	5 a., 24th	25th	29.26	W	W., 9	NNW	NW., 10	SSW-WNW.
Higbo, Am. S. S.	Hamburg	Norfolk	34 30 N.	46 14 W.	23d	2 p., 24th	24th	29.62	SSW	NNW	NNW	SSW., 10	S-SW-WNW.
Madoera, Du. S. S.	Galveston	Bremen	42 10 N.	32 07 W.	24th	10 a., 25th	25th	29.51	SW	S., 10	NNW	S., 10	NNE-NE.
Saucon, Am. S. S.	Italy	New York	38 00 N.	72 20 W.	27th	8 p., 27th	28th	30.00	N	NNE., 7	NE	NE., 9	SW-NW.
Bay State, Am. S. S.	Dundee	do.	55 30 N.	33 02 W.	26th	8 a., 27th	28th	29.28	S	NW., 9	NNE	10	SW-W.
Sac City, Am. S. S.	Rotterdam	Boston	48 58 N.	36 47 W.	28th	1 p., 28th	28th	29.68	SW	SW., 9	NNW	SW., 9	SW-W.
Anniston City, Am. S. S.	Port Said	do.	42 28 N.	65 19 W.	29th	6 p., 29th	30th	29.06	S	10	W	10	SW-W.
Bay State, Am. S. S.	Dundee	New York	51 40 N.	42 00 W.	29th	8 p., 29th	30th	29.86	NW	NW., 10	NNW	10	WNW-NW.
Innoko, Am. S. S.	Rotterdam	do.	40 35 N.	66 00 W.	30th	Noon, 30th	31st	29.56	SE	WSW., 10	NW	10	S-W.
Westport, Am. S. S.	Copenhagen	Boston	45 55 N.	55 20 W.	30th	30th	Feb. 1	29.38	SW	SW., 8	NW	NW., 10	SSW-NW.
Missouri, Br. S. S.	Antwerp	do.	46 30 N.	38 51 W.	31st	10 p., 31st	Feb. 1	29.56	SSW	SSW., 11	NW	SSW., 11	SSW-NW.
North Pacific Ocean													
Havana Maru, Jap. S. S.	Otaru, Japan	San Francisco	44 53 N.	158 30 E.	1st	4a., 2d	2d	28.98	E	W., 8	NW	11	SE-W.
Pres. Jefferson, Am. S. S.	Yokohama	Seattle	50 10 N.	140 W.	1st	8p., 1st	3d	29.49	WSW	SW., 8	WSW	W., 10	S-SW-WSW.
West Jessup, Am. S. S.	do.	Portland, Oreg.	43 35 N.	161 E.	1st	4a., 2d	3d	29.09	WSW	WSW., 11	NNW	NNW., 11	SE-W-N.
Talhybius, Br. S. S.	Victoria, B. C.	Yokohama	46 55 N.	166 06 E.	1st	4p., 2d	6th	28.87	WNW	N., 8	NNW	NW., 10	SE-W.
Toyooka Maru, Jap. S. S.	Yokohama	Victoria	49 02 N.	129 23 W.	2d	10p., 2d	3d	29.84	S	SE., 9	SW	SE., 9	SE-W.
Havana Maru, Jap. S. S.	Otaru	San Francisco	47 28 N.	173 25 W.	4th	10a., 6th	6th	29.37	ENE	NNE., 6	SW	11	NNE-W.
Can. Skirmisher, Br. S. S.	Panama	Vancouver	46 N.	125 27 W.	4th	7p., 4th	5th	29.87	W	W., 8	W	W., 8	WSW-W.
Emp. of Aus., Br. S. S.	Vancouver	Yokohama	52 N.	163 45 W.	5th	2p., 8th	8th	29.30	W	SW., 10	W	WSW., 11	SW-WSW.
Can. Winner, Br. S. S.	Shanghai	Vancouver	49 52 N.	172 20 W.	6th	Noon, 7th	9th	29.17	SSE	SSW., 6	WSW	WSW., 10	SSW-WSW.
West Jessup, Am. S. S.	Yokohama	Portland	49 10 N.	162 10 W.	7th	Noon, 7th	9th	29.58	WSW	S., 4	W	W., 10	S-SSW.
Havana Maru, Jap. S. S.	Otaru	San Francisco	44 29 N.	140 41 W.	11th	2p., 12th	13th	29.76	S	SSW	NNW	11	SW-WNW.
Elkton, Am. S. S.	San Pedro	Yokohama	32 16 N.	155 58 E.	11th	8a., 11th	15th	29.34	SW	W	NW	W., 9	SW-NW.
West O'Rowa, Am. S. S.	Portland	do.	36 54 N.	143 07 E.	12th	3p., 12th	13th	29.66	NW	SW	NNW	NNW., 9	SW-NW.
Hawaii Maru, Jap. S. S.	Yokohama	Victoria	50 15 N.	162 53 W.	12th	6p., 13th	15th	29.24	E	S	W	8	SW-NW.
S. C. T. Dodd, Am. S. S.	Marcus Hook	San Francisco	15 10 N.	94 W.	14th	4p.	14th	29.78	NW	NW., 7	NNE	8	SW-NW.
Makawell, Am. S. S.	Bellingham	Kahului, Hawaii	46 11 N.	129 42 W.	17th	3p., 17th	19th	29.66	S	S., 8	S	S., 10	None.
Salina, Am. S. S.	Manila	San Francisco	34 52 N.	156 43 E.	18th	2a., 19th	19th	29.48	NW	NNW	NNW	NNW., 10	None.
West Keats, Am. S. S.	Tsingtao	Portland	47 35 N.	145 15 W.	18th	2a., 19th	19th	29.20	ENE	N., 8	W	N., 8	NNE-NNW.
Dellwood, Am. S. S.	Seattle	Alaska	55 20 N.	131 38 W.	19th	8a., 19th	19th	28.84	E	SSE., 8	SW	SSE., 8	SE-SW.
West Sequana, Am. S. S.	Hongkong	San Francisco	34 40 N.	158 45 E.	18th	2a., 19th	20th	29.55	NW	W., 8	WSW	W., 8	NW-W.
F. H. Hillman, Am. S. S.	Panama	Los Angeles	13 56 N.	94 32 W.	23d	2p.	23d	29.90	NNW	N	NE	N., 9	NNW-N.
West Sequana, Am. S. S.	Hongkong	San Francisco	38 51 N.	176 34 W.	23d	Noon, 23d	24th	29.20	SE	SW., 10	WSW	SW., 10	SW-W.
Salina, Am. S. S.	Manila	do.	37 N.	179 32 E.	23d	Noon, 23d	24th	29.13	SE	S	W	SW., 11	SE-S.
Emp. of Asia, Br. S. S.	Yokohama	Vancouver	49 03 N.	128 W.	25th	6p., 25th	26th	29.31	SE	SE., 8	SSE	SE., 8	S-SE.
Makana, Am. S. S.	Mukilteo, Wash.	Hilo	39 25 N.	136 46 W.	29th	10a.	29th	29.80	W	NNW., 7	NW	NW., 8	2 pts. rt.
Sheaf Mead, Br. S. S.	Grays Harbor	Yokohama	35 36 N.	173 40 W.	29th	11p., 29th	31st	29.12	ESE	SSW., 7	NW	NW., 10	ESE-WNW.
Tascalusa, Br. S. S.	Manila	San Francisco	38 04 N.	176 E.	30th	4p., 30th	31st	28.86	SW	WSW., 10	NNW	WSW., 10	Steady.

NORTH PACIFIC OCEAN

By WILLIS EDWIN HURD

The North Pacific Ocean, though roughened by high winds, yet exhibited no conditions of abnormal storminess during the month of January, 1925. The average wind velocity, however, along the northwestern coast of the United States, as well as along southeastern Alaska, was somewhat higher than the normal for January, and a maximum wind velocity of 80 miles an hour from the south occurred at North Head, Wash., on the 18th. Except for this wind of hurricane velocity, no gales exceeding 11 on the Beaufort scale have been noted in any vessel report yet received for the month. Rain, snow, and hail squalls were frequent over the northern routes, and fresh to whole gales were of daily occurrence over some part of the ocean north of the 30th parallel. Nevertheless, many vessels made trans-Pacific passages without encountering gales, while others seemed to meet with a succession of rough areas, almost from coast to coast.

Fog occurred occasionally along the northern and southern steamer tracks, but none was reported west of the 180th meridian, except for a single instance southeast of Taiwan. It occurred frequently down the American coast from Cape Mendocino to near Cape San Lucas, and at San Francisco this January was the foggiest on record. South of the Gulf of Tehuantepec fog occurred on the 8th and 10th.

The pressure situation was quite different from that of December, 1924, except in the Far East, where the Asiatic anticyclone continued to prevail along the coast. East of the 180th meridian the month opened with the great Pacific high well developed between the Hawaiian Islands and the American Continent, fair weather and moderate winds prevailing generally over this whole area. To the northward toward the Aleutian low, cloudiness with snow squalls increased, the low being now well developed and central near Kodiak. Nearly similar conditions lasted throughout the first decade, except that the low oscillated considerably, with the center or centers variously located over the Aleutians and the Gulf of Alaska. During this period at least four disturbances were detached from the parent cyclone and entered the Canadian Northwest.

During the remainder of the month the high fluctuated a great deal in position and intensity, though the center rarely left the ocean for the continent as it did in December. Its general region, moreover, was practically gale-free throughout the month. The low meanwhile was extraordinarily active over a large region. Several cyclones came into its western area, and no less than seven depressions, during the last two decades, moved from its center in the Gulf of Alaska into the American mainland.

From about the 21st to the 30th an active center of low pressure over mid-ocean caused moderate gales to storm winds between the 35th and 40th parallels and for some distance on either side of the 180th meridian. This cyclone had receded northward by the close of the month.

The following data for Dutch Harbor, Midway Island, and Honolulu are indicative of the barometric conditions in their respective neighborhoods:

The average 8 p. m. pressure at Dutch Harbor was 29.72 inches, or 0.01 inch above the normal. From the 9th until the 23d pressure was above normal, except on the 10th and 13th. On the 13th the lowest pressure of the month, 28.92 inches, occurred. It was followed on the 15th by the highest pressure, 30.34. During the period from the 8th to the 15th several violent barometric fluctuations took place. Kodiak to the eastward seems to have been very near the mean position for the month of the center of low pressure for the entire northern region, and readings there rarely equaled 30 inches. The minimum was 28.70 on the 1st.

At Midway Island the average 8 p. m. pressure was 29.96 inches, being 0.04 inch below the normal. The extremes were 30.24, on the 1st and 2nd, and 29.68, on the 25th. Here readings were above normal on the first 10 days and mostly below thereafter.

At Honolulu pressure was again high during January, the average—8 a. m. and 8 p. m.—being 30.05 inches, or 0.04 inch above the normal. Subnormal readings occurred only from the 11th to the 14th. The extremes were 30.16, on the 22d, and 29.80, on the 13th.

This January at Honolulu was the warmest on record, due largely to the extraordinarily high night temperatures. The extremes were 81° and 65°. The total rainfall was 1.58 inches, or 2.20 inches below the normal. The month was sunnier than usual. The prevailing wind direction was from the east, though the kona (southerly winds) blew during several afternoons. For the first 11 days the wind velocity averaged nearly 17 miles an hour, and during 9 of them the maximum velocity exceeded 25 miles. The highest velocity was 37 miles an hour from the east, on the 8th.

Along the greater part of the coast of the United States precipitation was mostly below normal and temperatures were generally above. But farther north the reverse was true, January being exceptionally cold at Juneau and snowfall exceptionally heavy—53.9 inches.

There is no evidence of tropical-storm development in the Far East. The only gale reports for the Tropics near the American coast were by vessels in the gulf south of Salina Cruz. These winds, of force 8 to 9, were observed on the 14th, 23d, and 24th.

For the ocean as a whole gales were not so widespread as during the previous month, owing to the fact that lows generally ran less far south. There was a slight increase in the number of days with high winds over the 10° square, the center of which is 40° N., 140° W., but elsewhere there was a decrease or little change.

Vessels reported gales of force 11 on the 2d in east longitudes and on the 6th, 8th, 13th, and 24th, in west, as indicated by the table.

NOTES

American S. S. *Dellwood*, Capt. Robert W. Shears, Observer J. A. Higgins, Seattle toward Alaska and return:

The gale of January 19 (in 55° 20' N., 131° 38' W.) commenced with ESE. wind, accompanied with heavy snow. At time of lowest barometer torrential rain, with no wind, occurred.

British S. S. *Sheaf Mead*, Capt. H. B. Rae, Observer W. H. Sculthorpe, Grays Harbor, Wash., toward Yokohama:

Noon January 31, in lat. 35° 34' N., long. 174° 30' W. The height of the waves was about 45 feet from the trough to the crest. Tried fuel oil over side from lee bow with very little effect. Vessel steaming slow with wind and sea on starboard quarter.